



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/400,154	09/21/1999	HIDEO TAKIGUCHI	1232-4568	3080

27123 7590 04/07/2005

MORGAN & FINNEGAN, L.L.P.  
3 WORLD FINANCIAL CENTER  
NEW YORK, NY 10281-2101

EXAMINER
----------

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
----------	--------------

2612

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/400,154

Applicant(s)

TAKIGUCHI ET AL.

Examiner

Justin P Misleh

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27 - 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 - 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/23/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 February 2005 has been entered.

### ***Response to Arguments***

2. Although Claims 27 – 52 are new, Applicant's arguments filed 23 February 2005 have been fully considered but they are not persuasive.

3. Applicant argues that Fukasaka discloses that an application start signal is sent from a camera controller to the computer and an application in the computer is started when a shutter button of the camera is pushed and as a result Fukasaka discloses that the pushing operation of the shutter button of the camera or setting operation of the document of the camera is a trigger for starting the application. Although not specifically stated, the Applicant believes that Fukasaka differs from the present invention because Fukasaka does not teach that communication between the image input device and the computer is established prior to triggering the application.

The Examiner disagrees with Applicant's interpretation of Fukasaka. Fukasaka et al. disclose that the image input device (101) and the computer (201) are connected (e.g. see the

Art Unit: 2612

“arrowed” connection in figure 1). Furthermore, while Fukasaka does not go into the actual communication detail between the image input device and the computer, it would be impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.

4. There are no further objections to the specification, abstract, and drawings.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 27, 28, 30, 47, 49, and 51** are rejected under 35 U.S.C. 102(b) as being anticipated by Fukasaka et al. (EP 860 978 A2).

7. For **Claim 27**, Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in columns 6 (lines 30 – 58), 7 (lines 1 – 16), 8 (lines 42 – 46), 10 (lines 10 – 20 and 52 – 58), and 11 (lines 1 – 5), an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 – 19) and a computer (201) having a plurality of software programs (application programs; also see column 10, lines 10 – 19) each corresponding to each of the plurality of operation modes of the image input device (“adding a function for initiating an application” program), comprising:

Art Unit: 2612

a transmitting unit (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the "arrowed" connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.)

a receiving unit (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a control unit adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation

Art Unit: 2612

levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

8. As for **Claim 28**, Fukasaka et al. states, in column 6 (lines 46 – 49), that image signals are constantly transferred to the computer (201 – 204) from the image input device (101 – 104) where they are displayed on the display (23) until the shutter button (11) is depressed on the image input device (101 - 104) thereby initiating an application program to transfer a still image from the image input device (101 – 104) to the computer (201 – 204), also for display on the display (23). Therefore, Fukasaka et al. disclose wherein the operation modes of said image input device include at least an image sensing mode.

9. As for **Claim 30**, Fukasaka et al. states, in column 6 (lines 46 – 49), that image signals are constantly transferred to the computer (201 – 204) from the image input device (101 – 104) where they are displayed on the display (23) until the shutter button (11) is depressed on the image input device (101 - 104) thereby initiating an application program to transfer a still image from the image input device (101 – 104) to the computer (201 – 204), also for display on the display (23).

Therefore, Fukasaka et al. disclose wherein in the case that the operation mode of said image input device is the image sensing mode, said control unit selects an image sensing

Art Unit: 2612

software and makes start the image sensing software, and the image sensing software displays a preview image and senses an image on said computer.

10. For **Claim 47**, Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in columns 6 (lines 30 – 58), 7 (lines 1 – 16), 8 (lines 42 – 46), 10 (lines 10 – 20 and 52 – 58), and 11 (lines 1 – 5), a method of controlling an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 – 19) and a computer (201) having a plurality of software programs (application programs; also see column 10, lines 10 – 19) each corresponding to each of the plurality of operation modes of the image input device (“adding a function for initiating an application” program), comprising:

a transmitting step (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the “arrowed” connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.)

a receiving step (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a control step adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

11. For **Claim 49**, Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in columns 6 (lines 30 – 58), 7 (lines 1 – 16), 8 (lines 42 – 46), 10 (lines 10 – 20 and 52 – 58), and 11 (lines 1 – 5), a storage medium (hard disk 24, CD-ROM, or other media) that stores a control program for controlling an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 – 19) and a computer (201) having a plurality of software programs (application programs; also see column



Art Unit: 2612

10, lines 10 – 19) each corresponding to each of the plurality of operation modes of the image input device (“adding a function for initiating an application” program), said control program comprising:

a code of a transmitting step (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the “arrowed” connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.)

a code of a receiving step (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a code of a control step adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response

Art Unit: 2612

to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

12. For **Claim 51**, Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in columns 6 (lines 30 – 58), 7 (lines 1 – 16), 8 (lines 42 – 46), 10 (lines 10 – 20 and 52 – 58), and 11 (lines 1 – 5), a program product (hard disk 24, CD-ROM, or other media) that comprises a control program for controlling an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 – 19) and a computer (201) having a plurality of software programs (application programs; also see column 10, lines 10 – 19) each corresponding to each of the plurality of operation modes of the image input device (“adding a function for initiating an application” program), said control program comprising:

a code of a transmitting step (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input

Art Unit: 2612

device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the “arrowed” connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.)

a code of a receiving step (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a code of a control step adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and

Art Unit: 2612

a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claim 36, 37, 38, 40, 46, 48, 50, and 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasaka et al. (EP 860 978 A2).

15. As for **Claims 36 and 46**, while Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), an image input device having a plurality of operation modes, wherein buttons and switches such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button correspond to the plurality of operation modes, and a computer having a plurality of software programs, wherein the computer selects and starts at least a software program corresponding to an operation mode in response to the operation of the buttons and switches, Fukasaka et al. does not specifically disclose wherein the operation mode of said image input device is switched by a

Art Unit: 2612

fixed switch or dial switch arranged on said image input device, or operation/setup menu in an LCD panel.

However, Official Notice (MPEP § 2144.03) is taken that both the concepts and advantages of providing that the operation mode of said image input device is switched by a fixed switch or dial switch arranged on said image input device, or operation/setup menu in an LCD panel are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have provided that the operation mode of said image input device is switched by a fixed switch or dial switch arranged on said image input device, or operation/setup menu in an LCD panel for the advantage of standardizing the operation of the device such that the device is not overly large.

16. For **Claim 37**, Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in columns 6 (lines 30 – 58), 7 (lines 1 – 16), 8 (lines 42 – 46), 10 (lines 10 – 20 and 52 – 58), and 11 (lines 1 – 5), an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 – 19) and a computer (201) having a plurality of software programs (application programs; also see column 10, lines 10 – 19) each corresponding to each of the plurality of operation modes of the image input device (“adding a function for initiating an application” program), comprising:

a transmitting unit (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the “arrowed” connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be

Art Unit: 2612

impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.)

a receiving unit (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a control unit adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is

thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

Fukasaka et al. clearly disclose initiating a plurality of application programs corresponding to a plurality of operation modes; albeit, Fukasaka et al. do not disclose a single software program that initiates a plurality of modes corresponding to the plurality of operation modes.

However, **Official Notice** (MPEP § 2144.03) is taken the both the concepts and advantages of providing a single software program that initiates a plurality of modes corresponding to a plurality of functions are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a single software program that initiates a plurality of modes corresponding to a plurality of functions into the image input system of Fukasaka et al. as a means to increase the efficiency of the image input system thereby reducing wasted user waiting times.

17. As for **Claim 38**, Fukasaka et al. states, in column 6 (lines 46 – 49), that image signals are constantly transferred to the computer (201 – 204) from the image input device (101 – 104) where they are displayed on the display (23) until the shutter button (11) is depressed on the image input device (101 - 104) thereby initiating an application program to transfer a still image from the image input device (101 – 104) to the computer (201 – 204), also for display on the display (23). Therefore, Fukasaka et al. disclose wherein the operation modes of said image input device include at least an image sensing mode.

18. As for **Claim 40**, Fukasaka et al. states, in column 6 (lines 46 – 49), that image signals are constantly transferred to the computer (201 – 204) from the image input device (101 – 104)

where they are displayed on the display (23) until the shutter button (11) is depressed on the image input device (101 - 104) thereby initiating an application program to transfer a still image from the image input device (101 - 104) to the computer (201 - 204), also for display on the display (23).

Therefore, Fukasaka et al. disclose wherein in the case that the operation mode of said image input device is the image sensing mode, said control unit selects an image sensing software and makes start the image sensing software, and the image sensing software displays a preview image and senses an image on said computer.

19. For **Claim 48**, Fukasaka et al. disclose, as shown in figures 1 - 4 and as stated in columns 6 (lines 30 - 58), 7 (lines 1 - 16), 8 (lines 42 - 46), 10 (lines 10 - 20 and 52 - 58), and 11 (lines 1 - 5), a method of controlling an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 - 19) and a computer (201) having a plurality of software programs (application programs; also see column 10, lines 10 - 19) each corresponding to each of the plurality of operation modes of the image input device ("adding a function for initiating an application" program), comprising:

a transmitting step (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the "arrowed" connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be impossible for the image sensing apparatus to transmit the application execution request signal to



Art Unit: 2612

the computer without a communication between the image sensing apparatus and computer being previously established.)

a receiving step (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a control step adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is

thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

Fukasaka et al. clearly disclose initiating a plurality of application programs corresponding to a plurality of operation modes; albeit, Fukasaka et al. do not disclose a single software program that initiates a plurality of modes corresponding to the plurality of operation modes.

However, **Official Notice** (MPEP § 2144.03) is taken the both the concepts and advantages of providing a single software program that initiates a plurality of modes corresponding to a plurality of functions are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a single software program that initiates a plurality of modes corresponding to a plurality of functions into the image input system of Fukasaka et al. as a means to increase the efficiency of the image input system thereby reducing wasted user waiting times.

20. For **Claim 50**, Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in columns 6 (lines 30 – 58), 7 (lines 1 – 16), 8 (lines 42 – 46), 10 (lines 10 – 20 and 52 – 58), and 11 (lines 1 – 5), a storage medium (hard disk 24, CD-ROM, or other media) that stores a control program for controlling an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 – 19) and a computer (201) having a plurality of software programs (application programs; also see column 10, lines 10 – 19) each corresponding to each of the plurality of operation modes of the image input device (“adding a function for initiating an application” program), said control program comprising:

a code of a transmitting step (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the “arrowed” connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.)

a code of a receiving step (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a code of a control step adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where

buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

Fukasaka et al. clearly disclose initiating a plurality of application programs corresponding to a plurality of operation modes; albeit, Fukasaka et al. do not disclose a single software program that initiates a plurality of modes corresponding to the plurality of operation modes.

However, Official Notice (MPEP § 2144.03) is taken the both the concepts and advantages of providing a single software program that initiates a plurality of modes corresponding to a plurality of functions are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included a single software program that initiates a plurality of modes corresponding to a plurality of functions into the image input system of Fukasaka et al. as a means to increase the efficiency of the image input system thereby reducing wasted user waiting times.

21. For **Claim 52**, Fukasaka et al. disclose, as shown in figures 1 – 4 and as stated in columns 6 (lines 30 – 58), 7 (lines 1 – 16), 8 (lines 42 – 46), 10 (lines 10 – 20 and 52 – 58), and 11 (lines 1 – 5), a program product (hard disk 24, CD-ROM, or other media) that comprises a control

Art Unit: 2612

program for controlling an image input system, which includes an image input device (image sensing apparatus 101) having a plurality of operation modes (see column 10, lines 10 – 19) and a computer (201) having a plurality of software programs (application programs; also see column 10, lines 10 – 19) each corresponding to each of the plurality of operation modes of the image input device (“adding a function for initiating an application” program), said control program comprising:

a code of a transmitting step (camera controller 12) adapted to transmit information (application execution request signal) indicating an operation mode set in said image input device (101) to said computer (201) when said image input device (101) and said computer are connected with each other (always connected; see the “arrowed” connection in figure 1) and a communication between said image input device (101) and said computer (201) is established (It would be impossible for the image sensing apparatus to transmit the application execution request signal to the computer without a communication between the image sensing apparatus and computer being previously established.)

a code of a receiving step (expansion board 23) arranged in said computer (201) and adapted to receive the information indicating the operation mode set in said image input device (101); and

a code of a control step adapted to select a software program, which corresponds to the operation mode set in said image input device, from a plurality of software programs and make start the selected software program (see explanation below).

Fukasaka et al. disclose, as stated in column 7 (lines 9 – 12), that an application program is automatically initiated, within the computer (201 – 204), by pressing a shutter button (11) on

Art Unit: 2612

the image input device (101 – 104) without interfacing with the operator of the image input system. As stated in column 7 (lines 12 – 16), the predetermined application program, such as a TV conference application program or a TV phone application program, is executed in response to the operation of the image sensing apparatus (101 – 104) and may be stored in the hard disk (24) of the computer (201 – 204) or stored in a CD-ROM or other media (as stated in column 9, line 55 – column 10, line 5). Also, as stated in column 10 (lines 10 – 19), in a case where buttons and switches, such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button, are provided in the image sensing apparatus (101 – 104), it is possible to add a function for initiating an application program by operating one of these buttons and switches or operating these buttons and switches in different combinations. Since each button or switch can initiate an application program, each button or switch, on the image input device (101 – 104), is thought of by the Examiner as a separate operation mode, thereby the image input device has a plurality of operation modes.

Fukasaka et al. clearly disclose initiating a plurality of application programs corresponding to a plurality of operation modes; albeit, Fukasaka et al. do not disclose a single software program that initiates a plurality of modes corresponding to the plurality of operation modes.

However, **Official Notice** (MPEP § 2144.03) is taken the both the concepts and advantages of providing a single software program that initiates a plurality of modes corresponding to a plurality of functions are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have

included a single software program that initiates a plurality of modes corresponding to a plurality of functions into the image input system of Fukasaka et al. as a means to increase the efficiency of the image input system thereby reducing wasted user waiting times.

22. **Claims 29, 39, 32, and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasaka et al. in view of Norris.

23. As for **Claims 29 and 39**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), an image input device having a plurality of operation modes, wherein buttons and switches such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button correspond to the plurality of operation modes, and a computer having a plurality of software programs, wherein the computer selects and starts at least a software program corresponding to an operation mode in response to the operation of the buttons and switches.

While Fukasaka et al. disclose selecting a software program from a plurality of software programs in a computer in response to the selection of an operation mode from a plurality of operation modes in an image input device and more specifically, an image sensing mode in the image input device and image sensing software in the computer, Fukasaka et al. does not disclose an image playback mode in the image input device and image playback software in the computer.

On the other hand, Norris also discloses an image input system. More specifically, Norris discloses, as shown in figures 1 and 4A and as a stated in column 7 (lines 46 – 61), an image input device (12) and a computer system (18) wherein the image input device (12) has an

Art Unit: 2612

image playback mode and the computer (18) has image browsing software (the album function 76).

As stated in column 1 (lines 26 – 52) of Norris, at the time the invention was made it would have been obvious to one with ordinary skill in the art to have included an image input device (12) with an image playback mode and a computer (18) with image browsing software (76), as taught by Norris, in the image input system, disclosed by Fukasaka et al., for the advantage of providing a user of the system with tools to create an electronic photograph album.

24. As for **Claims 32 and 42**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), an image input device having a plurality of operation modes, wherein buttons and switches such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button correspond to the plurality of operation modes, and a computer having a plurality of software programs, wherein the computer selects and starts at least a software program corresponding to an operation mode in response to the operation of the buttons and switches.

While Fukasaka et al. disclose selecting a software program from a plurality of software programs in a computer in response to the selection of an operation mode from a plurality of operation modes in an image input device and more specifically, an image sensing mode in the image input device and image sensing software in the computer, Fukasaka et al. does not disclose an image playback mode in the image input device and image playback software in the computer.

On the other hand, Norris also discloses an image input system. More specifically, Norris discloses, as shown in figures 1 and 4A and as stated in column 7 (lines 46 – 61), an



image input device (12) and a computer system (18) wherein the image input device (12) has a slideshow playback mode and the computer (18) has slideshow playback software (the slideshow function 74) that automatically displays the loaded images on a screen (36).

As stated in column 1 (lines 26 – 52) of Norris, at the time the invention was made it would have been obvious to one with ordinary skill in the art to have included an image input device (12) with an slideshow playback mode and a computer (18) with slideshow playback software (76), as taught by Norris, in the image input system, disclosed by Fukasaka et al., for the advantage of allowing a user of the system to systematically view all the loaded images so as to thoroughly select images for printing and/or permanent storage.

25. **Claims 31 and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasaka et al. in view of Driscoll, Jr. et al.

26. As for **Claims 31 and 41**, Fukasaka et al. disclose, as stated in column 10 (lines 10 – 19), an image input device having a plurality of operation modes, wherein buttons and switches such as a power switch, a shutter button which has different operation levels (e.g. half-stroke and full-stroke), an automatic focusing button, a white balance button, and a zoom button correspond to the plurality of operation modes, and a computer having a plurality of software programs, wherein the computer selects and starts at least a software program corresponding to an operation mode in response to the operation of the buttons and switches.

While Fukasaka et al. disclose selecting a software program from a plurality of software programs in a computer in response to the selection of an operation mode from a plurality of operation modes in an image input device and more specifically, an image sensing mode in the

image input device and image sensing software in the computer, Fukasaka et al. does not disclose an image playback mode in the image input device and image playback software in the computer.

On the other hand, Driscoll, Jr. et al. also disclose an image input system. More specifically, Driscoll, Jr. et al. disclose, as shown in figures 11C and 13A and as stated in column 10 (lines 32 – 47), an image input device (1205) and a computer system (1200) wherein the image input device (1205) has a panoramic image sensing mode and the computer (1200) has panoramic image sensing generation software for synthesizing loaded images.

As stated in column 1 (lines 28 – 37) of Driscoll, Jr. et al., at the time the invention was made it would have been obvious to one with ordinary skill in the art to have included an image input device (1205) with an panoramic image sensing mode and a computer (1200) with panoramic image sensing software, as taught by Driscoll, Jr. et al., in the image input system, disclosed by Fukasaka et al., for the advantage of providing a user of the system with an increased field of view so as to allow the user to choose the viewing direction of the image.

27. **Claims 33 – 35 and 43 – 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukasaka et al. in view of Norris.

28. As for **Claims 33 and 43**, while Fukasaka et al. disclose that the image input device (101) and computer (201) are connected and a communication between each other is established, wherein, in the computer, a software program is selected and started in response to an operation mode selection, in the image input device, Fukasaka et al. does not disclose wherein when said image input device and said computer are disconnected in a state that said image input device

Art Unit: 2612

and said computer are connected with each other and the software program corresponding to the operation mode of said image input device is operating, said control unit keeps the software program operating.

On the other hand, Mamiya also discloses an image input device and a computer. More specifically, as shown in figures 1, Mamiya discloses, “a state that image input device (110) and computer (120) are connected with each other”. Furthermore, Mamiya discloses, as shown in figures 1 and 3a, when a freeze operation (Step S308) wherein in a freeze process moving images are no longer transmitted to the computer (see column 4, lines 6 – 33) such that the computer can store a still image (see figure 3b); however, the software program (application software) has not terminated and is still operating (the software terminates in Step S309). The Examiner interprets the freeze process (Step S308) as corresponding to “disconnected in a state that image input device (110) and computer (120) are connected with each other”. Therefore, Mamiya teaches wherein when said image input device and said computer are disconnected in a state that said image input device and said computer are connected with each other and the software program corresponding to the operation mode of said image input device is operating, said control unit keeps the software program operating.

As stated in column 6 (lines 30 – 40), at the time the invention was made, it would have been obvious to one with ordinary skill in the art to keep the software program operating when the image input device and computer are disconnected in a state that said image input device and said computer are connected with each other, as taught by Mamiya, in the image input system, disclosed by Fukasaka et al., for the advantage of allowing a user to perform the same function of taking a still image by using either the image input device or the computer.

29. As for **Claims 34 and 44**, while Fukasaka et al. disclose that the image input device (101) and computer (201) are connected and a communication between each other is established, wherein, in the computer, a software program is selected and started in response to an operation mode selection, in the image input device, Fukasaka et al. does not disclose wherein when said image input device and said computer are disconnected in a state that said image input device and said computer are connected with each other and the software program corresponding to the operation mode of said image input device is operating, said control unit terminates an operation of the software program.

On the other hand, Mamiya also discloses an image input device and a computer. More specifically, as shown in figures 1, Mamiya discloses, “a state that image input device (110) and computer (120) are connected with each other”. Furthermore, Mamiya discloses, as shown in figures 1 and 3a, when a release button (118) in the image input device is not depressed, the device driver software terminates. The Examiner interprets the release flag not being set (No result in Step S302) as corresponding to “disconnected in a state that image input device (110) and computer (120) are connected with each other”. Therefore, Mamiya teaches wherein when said image input device and said computer are disconnected in a state that said image input device and said computer are connected with each other and the software program corresponding to the operation mode of said image input device is operating, said control unit terminates an operation of the software program.

As stated in column 6 (lines 30 – 40), at the time the invention was made, it would have been obvious to one with ordinary skill in the art to keep the software program operating when the image input device and computer are disconnected in a state that said image input device and

said computer are connected with each other, as taught by Mamiya, in the image input system, disclosed by Fukasaka et al., for the advantage of allowing a user to perform the same function of taking a still image by using either the image input device or the computer.

30. As for **Claims 35 and 45**, while Fukasaka et al. disclose that the image input device (101) and computer (201) are connected and a communication between each other is established, wherein, in the computer, a software program is selected and started in response to an operation mode selection, in the image input device, Fukasaka et al. does not disclose wherein when said image input device and said computer are disconnected in a state that said image input device and said computer are connected with each other and the software program corresponding to the operation mode of said image input device is operating, said control unit keeps the software program operating or the software is terminated.

On the other hand, Mamiya also discloses an image input device and a computer. More specifically, as shown in figures 1, Mamiya discloses, “a state that image input device (110) and computer (120) are connected with each other”. Furthermore, Mamiya discloses, as shown in figures 1 and 3a, when a release button (118) in the image input device is not depressed, the device driver software terminates. The Examiner interprets the release flag not being set (No result in Step S302) as corresponding to “disconnected in a state that image input device (110) and computer (120) are connected with each other”. Therefore, Mamiya teaches wherein when said image input device and said computer are disconnected in a state that said image input device and said computer are connected with each other and the software program corresponding to the operation mode of said image input device is operating, said control unit terminates an operation of the software program.

As stated in column 6 (lines 30 – 40), at the time the invention was made, it would have been obvious to one with ordinary skill in the art to keep the software program operating or terminates the software when the image input device and computer are disconnected in a state that said image input device and said computer are connected with each other, as taught by Mamiya, in the image input system, disclosed by Fukasaka et al., for the advantage of allowing a user to perform the same function of taking a still image by using either the image input device or the computer.

***Cited Prior Art & Conclusion***

31. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Fukasaka et al. (US 6 867 800 B1) is a sister patent to Fukasaka et al. (EP 860 978 A2).

32. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:00 PM and on alternating Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 571.272.7308. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

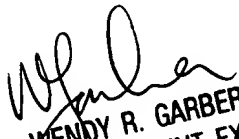
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2612

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM

April 4, 2005

  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600